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Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln
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Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
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Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ile Pro Pro Gly
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Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly Ser Phe Thr Cys Arg
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Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr Thr Asp Asp Arg Leu
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Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
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Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr Ala Lys Val His Gly
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Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala Asp Ala Leu Val Asp
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Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu Lys Gly Val Ala Gly
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Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp Glu His Arg Thr Cys
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Cys His Thr Arg Ala Leu Pro Gly Ala Trp Val Lys Gly Gln Ser Ala
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Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg Arg Val
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Glu Trp Gly Thr Val Gln Leu Arg Gly Ser Trp Arg Val Gly Gln Thr
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Ala Gln Glu Val Ser Arg Leu Cys Leu Leu Pro Ala Gly Thr Tyr Lys
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Val Val Pro Ser Thr Tyr Leu Pro Asp Thr Glu Gly Ala Phe Thr Val
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<212> PRT
<213> Human

<400> 4
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35 40 45

Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln
50 55 60

Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
65 70 75 80

Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ile Pro Pro Gly
85 90 95

Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly Ser Phe Thr Cys Arg
100 105 110

Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr Thr Asp Asp Arg Leu
115 120 125

Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
130 135 140

Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr Ala Lys Val His Gly
145 150 155 160

Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala Asp Ala Leu Val Asp
165 170 175

Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu Lys Gly Val Ala Gly
180 185 190

Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp Glu His Arg Thr Cys
195 200 205

Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu Ile Ser Cys Cys Val
210 215 220

Leu Ser Pro Arg Ala Gly Ala Arg Glu Leu Gly Glu Phe His Ala Phe
225 230 235 240

Ile Val Ser Asp Leu Arg Glu Leu Gln Gly Gln Ala Gly Gln Cys Ile
245 250 255

Leu Leu Leu Arg Ile Gln Asn Pro Trp Gly Arg Arg Cys Trp Gln Gly
260 265 270

Leu Trp Arg Glu Gly Gly Glu Gly Trp Ser Gln Val Asp Ala Ala Val
275 280 285

Ala Ser Glu Leu Leu Ser Gln Leu Gln Glu Gly Glu Phe Trp Val Glu
290 295 300

Glu Glu Glu Phe Leu Arg Glu Phe Asp Glu Leu Thr Val Gly Tyr Pro
305 310 315 320

Val Thr Glu Ala Gly His Leu Gln Ser Leu Tyr Thr Glu Arg Leu Leu
325 330 335

Cys His Thr Arg Ala Leu Pro Gly Ala Trp Val Lys Gly Gln Ser Ala
340 345 350

Gly Gly Cys Arg Asn Asn Ser Gly Phe Pro Ser Asn Pro Lys Phe Trp
355 360 365

Leu Arg Val Ser Glu Pro Ser Glu Val Tyr Ile Ala Val Leu Gln Arg
370 375 380

Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala Leu Val
385 390 395 400

Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly Lys His
405 410 415

Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg Arg Val
420 425 430

Asn Leu Pro Arg Val Leu Ser Met Pro Pro Val Ala Gly Thr Ala Cys
435 440 445

His Ala Tyr Asp Arg Glu Val His Leu Arg Cys Glu Leu Ser Pro Gly
450 455 460

Tyr Tyr Leu Ala Val Pro Ser Thr Phe Leu Lys Asp Ala Pro Gly Glu
465 470 475 480

Phe Leu Leu Arg Val Phe Ser Thr Gly Arg Val Ser Leu Arg Ala Leu
485 490 495

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Ala Pro Ala Ala Ser Ala Ser Leu Cys Ile Ser Thr Ala Gly Pro Val
            500                 505                 510

Thr Pro Ser Ser Thr Pro Ser Ala Ser Ile Ser Ser Arg Ser Gln Arg
        515                 520                 525

Val Glu Gly Ala Arg Thr His Pro His Cys Cys Cys Arg Ser Arg Cys
    530                 535                 540
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<211> 2297
<212> DNA
<213> Human

<400> 5

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<211> 517
<212> PRT
<213> Human

<400> 6

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Pro Leu Ala Gln Phe Arg Glu Asp Ile Thr Trp Arg Arg Pro Gln Glu
         35                  40                  45

Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln
     50                  55                  60

Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
 65                  70                  75                  80

Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ile Pro Pro Gly
                 85                  90                  95

Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly Ser Phe Thr Cys Arg
            100                 105                 110

Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr Thr Asp Asp Arg Leu
        115                 120                 125

Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
    130                 135                 140

Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr Ala Lys Val His Gly
145                 150                 155                 160

Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala Asp Ala Leu Val Asp
                165                 170                 175

Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu Lys Gly Val Ala Gly
            180                 185                 190

Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp Glu His Arg Thr Cys
        195                 200                 205

Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu Ile Ser Cys Cys Val
    210                 215                 220

Leu Ser Pro Arg Ala Gly Ala Arg Glu Leu Gly Glu Phe His Ala Phe
225                 230                 235                 240

Ile Val Ser Asp Leu Arg Glu Leu Gln Gly Gln Ala Gly Gln Cys Ile
                245                 250                 255
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Leu Leu Leu Arg Ile Gln Asn Pro Trp Gly Arg Arg Cys Trp Gln Gly
            260                 265                 270

Leu Trp Arg Glu Gly Gly Glu Gly Trp Ser Gln Val Asp Ala Ala Val
        275                 280                 285

Ala Ser Glu Leu Leu Ser Gln Leu Gln Glu Gly Glu Phe Trp Val Glu
    290                 295                 300

Glu Glu Glu Phe Leu Arg Glu Phe Asp Glu Leu Thr Val Gly Tyr Pro
305                 310                 315                 320

Val Thr Glu Ala Gly His Leu Gln Ser Leu Tyr Thr Glu Arg Leu Leu
                325                 330                 335

Cys His Thr Arg Ala Leu Pro Gly Ala Trp Val Lys Gly Gln Ser Ala
            340                 345                 350

Gly Gly Cys Arg Asn Asn Ser Gly Phe Pro Ser Asn Pro Lys Phe Trp
        355                 360                 365

Leu Arg Val Ser Lys Pro Ser Glu Val Tyr Ile Ala Val Leu Gln Arg
    370                 375                 380

Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala Leu Val
385                 390                 395                 400

Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly Lys His
                405                 410                 415

Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Pro Glu Gly Gly Arg
            420                 425                 430

Ser Gln Asp Ala Pro Pro Leu Leu Leu Gln Glu Pro Leu Leu Ser Cys
        435                 440                 445

Val Pro His Arg Tyr Ala Gln Glu Val Ser Arg Leu Cys Leu Leu Pro
    450                 455                 460

Ala Gly Thr Tyr Lys Val Val Pro Ser Thr Tyr Leu Pro Asp Thr Glu
465                 470                 475                 480

Gly Ala Phe Thr Val Thr Ile Ala Thr Arg Ile Asp Arg Pro Ser Ile
                485                 490                 495

His Ser Gln Glu Met Leu Gly Gln Phe Leu Gln Glu Val Ser Val Met
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Ala Val Met Lys Thr
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<211> 2001
<212> DNA
<213> Human

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<211> 513
<212> PRT
<213> Human

<400> 8
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Pro Leu Ala Gln Phe Arg Glu Asp Ile Thr Trp Arg Arg Pro Gln Glu
35 40 45

Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln
50 55 60

Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
65 70 75 80

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Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ile Pro Pro Gly
                  85                  90                  95

Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly Ser Phe Thr Cys Arg
            100                 105                 110

Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr Thr Asp Asp Arg Leu
        115                 120                 125

Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
    130                 135                 140

Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr Ala Lys Val His Gly
145                 150                 155                 160

Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala Asp Ala Leu Val Asp
                165                 170                 175

Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu Lys Gly Val Ala Gly
            180                 185                 190

Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp Glu His Arg Thr Cys
        195                 200                 205

Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu Ile Ser Cys Cys Val
    210                 215                 220

Leu Ser Pro Arg Ala Gly Ala Arg Glu Leu Gly Glu Phe His Ala Phe
225                 230                 235                 240

Ile Val Ser Asp Leu Arg Glu Leu Gln Gly Gln Ala Gly Gln Cys Ile
                245                 250                 255

Leu Leu Leu Arg Ile Gln Asn Pro Trp Gly Arg Arg Cys Trp Gln Gly
            260                 265                 270

Leu Trp Arg Glu Gly Gly Glu Gly Trp Ser Gln Val Asp Ala Ala Val
        275                 280                 285

Ala Ser Glu Leu Leu Ser Gln Leu Gln Glu Gly Glu Phe Trp Val Glu
    290                 295                 300

Glu Glu Glu Phe Leu Arg Glu Phe Asp Glu Leu Thr Val Gly Tyr Pro
305                 310                 315                 320

Val Thr Glu Ala Gly His Leu Gln Ser Leu Tyr Thr Glu Arg Leu Leu
                325                 330                 335

Cys His Thr Arg Ala Leu Pro Gly Ala Trp Val Lys Gly Gln Ser Ala
            340                 345                 350

Gly Gly Cys Arg Asn Asn Ser Gly Phe Pro Ser Asn Pro Lys Phe Trp
        355                 360                 365

Leu Arg Val Ser Glu Pro Ser Glu Val Tyr Ile Ala Val Leu Gln Arg
    370                 375                 380
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Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala Leu Val
385                 390                 395                 400

Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly Lys His
                405                 410                 415

Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg Arg Val
            420                 425                 430

Asn Leu Pro Arg Val Leu Ser Met Pro Pro Val Ala Gly Thr Ala Cys
        435                 440                 445

His Ala Tyr Asp Arg Glu Val His Leu Arg Cys Glu Leu Ser Pro Gly
    450                 455                 460

Tyr Tyr Leu Ala Val Pro Ser Thr Phe Leu Lys Asp Ala Pro Gly Glu
465                 470                 475                 480

Phe Leu Leu Arg Val Phe Ser Thr Gly Arg Val Ser Leu Arg Ser Gln
                485                 490                 495

Arg Val Glu Gly Ala Arg Thr His Pro His Cys Cys Cys Arg Ser Arg
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Cys
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<211> 2204
<212> DNA
<213> Human

<400> 9
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<211> 444
<212> PRT
<213> Human

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35 40 45

Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln
50 55 60

Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
65 70 75 80

Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ile Pro Pro Gly
85 90 95

Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly Ser Phe Thr Cys Arg
100 105 110

Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr Thr Asp Asp Arg Leu
115 120 125

Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
130 135 140

Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr Ala Lys Val His Gly
145 150 155 160

Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala Asp Ala Leu Val Asp
165 170 175

Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu Lys Gly Val Ala Gly
180 185 190

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Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp Glu His Arg Thr Cys
        195                 200                 205

Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu Ile Ser Cys Cys Val
    210                 215                 220

Leu Ser Pro Arg Ala Gly Ala Arg Glu Leu Gly Glu Phe His Ala Phe
225                 230                 235                 240

Ile Val Ser Asp Leu Arg Glu Leu Gln Gly Gln Ala Gly Gln Cys Ile
                245                 250                 255

Leu Leu Leu Arg Ile Gln Asn Pro Trp Gly Arg Arg Cys Trp Gln Gly
            260                 265                 270

Leu Trp Arg Glu Gly Gly Glu Gly Trp Ser Gln Val Asp Ala Ala Val
        275                 280                 285

Ala Ser Glu Leu Leu Ser Gln Leu Gln Glu Gly Glu Phe Trp Val Glu
    290                 295                 300

Glu Glu Glu Phe Leu Arg Glu Phe Asp Glu Leu Thr Val Gly Tyr Pro
305                 310                 315                 320

Val Thr Glu Ala Gly His Leu Gln Ser Leu Tyr Thr Glu Arg Leu Leu
                325                 330                 335

Cys His Thr Arg Ala Leu Pro Gly Ala Trp Val Lys Gly Gln Ser Ala
            340                 345                 350

Gly Gly Cys Arg Asn Asn Ser Gly Phe Pro Ser Asn Pro Lys Phe Trp
        355                 360                 365

Leu Arg Val Ser Lys Pro Ser Glu Val Tyr Ile Ala Val Leu Gln Arg
    370                 375                 380

Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala Leu Val
385                 390                 395                 400

Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly Lys His
                405                 410                 415

Tyr Gln Ala Val Gly Leu His Leu Trp Lys Gly Val Thr Leu Gly Thr
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Thr Leu Phe Pro Val Pro Ser Trp Met Trp Pro Thr
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<213> Human

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Pro Leu Ala Gln Phe Arg Glu Asp Ile Thr Trp Arg Arg Pro Gln Glu
35 40 45

Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln

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     50                  55                  60

Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
 65                  70                  75                  80

Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ile Pro Pro Gly
                 85                  90                  95

Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly Ser Phe Thr Cys Arg
            100                 105                 110

Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr Thr Asp Asp Arg Leu
        115                 120                 125

Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
    130                 135                 140

Val Phe Trp Leu Pro Leu Leu Glu Lys Gly Pro Trp Val Leu Arg Ala
145                 150                 155                 160

Pro Val Gly Arg Ala Gly Gly Gly Cys Pro Gly Gly Pro Asp Arg Arg
                165                 170                 175

Pro Gly Arg Lys Met Glu Pro Glu Gly Arg Ser Arg Lys Arg Arg Pro
            180                 185                 190

Ala Gly Gln Ala Arg Pro Leu Gly Ala Gln Asp Leu Ser Ala Ala Ala
        195                 200                 205

Pro Pro Glu Gly Pro Val Ser Asp Gln Leu Leu Arg Ala Gln Pro Gln
    210                 215                 220

Ser Arg Cys Pro Gly Ala Gly Gly Val Pro Cys Leu His Cys Leu Gly
225                 230                 235                 240

Pro Ala Gly Ala Pro Gly Ser Gly Gly Pro Val His Pro Ala Ala Ala
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Asp Pro Glu Pro Leu Gly Pro Ala Val Leu Ala Gly Ala Leu Glu Arg
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<213> Human

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Pro Leu Ala Gln Phe Arg Glu Asp Ile Thr Trp Arg Arg Pro Gln Glu
35 40 45

Ile Cys Ala Thr Pro Arg Leu Phe Pro Asp Asp Pro Arg Glu Gly Gln
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Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
65 70 75 80

Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln Val Ser Cys Pro Val
85 90 95

Gln Leu Pro Ala Asp Trp Thr Cys Lys Val Gln Pro Val Trp Leu Glu
100 105 110

Phe Pro Cys Leu Pro Ile Ser Cys Arg Leu Arg Val Ser Ser Asp Thr
115 120 125

Ser Pro Asp Ser Ala Thr Trp Gly Ser Trp Lys
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<212> PRT
<213> Human

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20 25 30

Pro Leu Ala Gln Phe Arg Glu Asp Ile Thr Trp Arg Arg Pro Gln Val
35 40 45

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Pro Glu Gly Gly Arg Ser Gln Asp Ala Pro Pro Leu Leu Leu Gln Glu
     50                  55                  60

Pro Leu Leu Ser Cys Val Pro His Arg Tyr Ala Gln Glu Val Ser Arg
 65                  70                  75                  80

Leu Cys Leu Leu Pro Ala Gly Thr Tyr Lys Val Val Pro Ser Thr Tyr
                 85                  90                  95

Leu Pro Asp Thr Glu Gly Ala Phe Thr Val Thr Ile Ala Thr Arg Ile
            100                 105                 110

Asp Arg Pro Ser Ile His Ser Gln Glu Met Leu Gly Gln Phe Leu Gln
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Glu Val Ser Val Met Ala Val Met Lys Thr
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<213> Mus musculus

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             20                  25                  30

Pro Leu Ala Gln Phe Arg Glu Asp Ile Thr Trp Arg Arg Pro Gln Glu
         35                  40                  45

Ile Cys Ala Thr Pro Gln Leu Phe Pro Asp Asn Pro Trp Glu Gly Gln
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Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe Leu Cys Ala Cys Ala
 65                  70                  75                  80

Ala Leu Gln Lys Ser Gln His Leu Leu Asp Gln Val Phe Pro Pro Gly
                 85                  90                  95

Gln Pro Gly Trp Ser Asp Gln Lys Tyr Gln Gly Phe Phe Thr Cys Arg
            100                 105                 110

Ile Trp Gln Phe Gly His Trp Glu Glu Val Thr Ile Asp Asp Arg Leu
        115                 120                 125

Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg Cys Gln Arg Glu Asp
    130                 135                 140

Val Phe Trp Leu Pro Leu Leu Glu Lys Ala Tyr Ala Lys Val His Gly
145                 150                 155                 160

Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala Asp Ala Leu Val Asp
                165                 170                 175

Leu Thr Gly Ser Leu Ala Glu Arg Trp Ser Leu Lys Asp Val Thr Lys
            180                 185                 190

Ala Ser Gly Gln Gln Asp Arg Pro Ser Gly Gly Glu His Arg Thr Cys
        195                 200                 205

Arg Gln Leu Leu His Leu Lys Asp Arg Cys Leu Ile Ser Cys Ser Val
    210                 215                 220

Leu Ser Pro Arg Ala Gly Ala Arg Glu Leu Gly Glu Phe His Ala Phe
225                 230                 235                 240

Ile Ile Ser Asp Leu Gln Glu Leu Arg Ser Gln Thr Gly Gln Gly Ile
                245                 250                 255

Leu Leu Leu Arg Ile His Asn Pro Trp Gly Arg Arg Cys Trp Gln Gly
            260                 265                 270

Leu Trp Arg Glu Gly Gly Glu Gly Trp Asn Gln Val Glu Pro Ala Lys
        275                 280                 285

Glu Ser Glu Leu Leu Ala Gln Leu Gln Glu Gly Glu Phe Trp Val Glu
    290                 295                 300

Glu Glu Glu Phe Leu Arg Glu Phe Asp Glu Val Thr Ile Gly Tyr Pro
305                 310                 315                 320

Val Thr Glu Ala Gly His Leu Gln Ser Leu His Thr Glu Arg Val Leu
                325                 330                 335

Cys His Thr Arg Thr Leu Pro Gly Ala Trp Val Thr Gly Gln Ser Ala
            340                 345                 350

Gly Gly Cys Arg Asn Asn Ser Cys Phe Pro Cys Asn Pro Lys Phe Trp
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Leu Arg Leu Leu Glu Pro Ser Glu Val Cys Val Ala Val Leu Gln Arg
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Pro Arg Arg Arg Leu Val Gly Gln Thr Arg Ala Leu Ala Gly Ala Ser
385                 390                 395                 400

Pro Ala Pro Val Asn Leu Pro Gly Lys Asp Tyr Gln Ala Val Gly Leu
                405                 410                 415

His Ile Trp Lys Val Glu Lys Arg Lys Ile Ser Leu Pro Arg Val Leu
            420                 425                 430

Ser Ala Pro Pro Val Ala Gly Thr Ala Cys His Ala Tyr Asp Arg Glu
        435                 440                 445

Ile His Leu Arg Cys Glu Leu Ser Pro Gly Tyr Tyr Leu Ala Val Pro
    450                 455                 460

Ser Thr Phe Leu Lys Asp Val Pro Gly Gln Phe Leu Leu Arg Val Phe
465                 470                 475                 480

Phe Thr Gly Lys Ile Ser Leu Ser Ala Val Arg Leu Ala Thr Lys Gly
                485                 490                 495

Ala Ser Pro Gly Thr Ala Leu Pro Ala Gly Glu Trp Glu Thr Val Gln
            500                 505                 510

Leu Gln Gly Cys Trp Arg Ala Gly Gln Thr Ala Gly Gly Ser Arg Asn
        515                 520                 525

Phe Ala Ser Tyr Pro Cys Asn Pro Cys Leu Pro Phe Ser Val Pro Glu
    530                 535                 540

Gly Ala Gly Pro Arg Tyr Ile Arg Ile Thr Leu Gln Gln His Cys Arg
545                 550                 555                 560

Leu Ser Asp Ser Gln Leu His Pro Ile Gly Phe His Val Phe Gln Val
                565                 570                 575

Pro Ala Asp Gly Glu Asn Gln Asp Ala Cys Ser Leu Leu Leu Gln Glu
            580                 585                 590

Pro Leu Leu Ser Cys Val Pro His Arg Tyr Ala Gln Glu Val Ser Arg
        595                 600                 605

Leu Cys Leu Leu Ser Val Gly Asn Tyr Arg Ile Val Pro Ser Thr Tyr
    610                 615                 620

Leu Pro Asp Thr Glu Gly Thr Phe Thr Val Thr Ile Ala Thr Arg Ile
625                 630                 635                 640

Asp Arg Gln Ser Ile His Ser Gln Glu Met Leu Gly Gln Leu Leu Gln
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660 665

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<211> 2511
<212> DNA
<213> Mus musculus

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gctgtggacc ttggggctaa aatagggtgc tttgtcctgg attgaagaca tctcgggtcc 2280
agtgggtgct gcagggcggg gctagaactc ccaagtggta tcttcattcc ttagtgaagg 2340
ccaggagatt cctggggccc gggtttgttg tggaaagctt tgcagaattc acataacctt 2400
ctcgacttcg gaagccttac actaggcagg cggactgtga caaatgctaa aacctattta 2460
ttacttgaaa tatttttgga atgtgacttt ataaataaac atgaataatt t 2511

<210> 20
<211> 309
<212> PRT
<213> Human

<400> 20

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Met Asn Gly Thr Tyr Asn Thr Cys Gly Ser Ser Asp Leu Thr Trp Pro
 1               5                  10                  15

Pro Ala Ile Lys Leu Gly Phe Tyr Ala Tyr Leu Gly Val Leu Leu Val
            20                  25                  30

Leu Gly Leu Leu Leu Asn Ser Leu Ala Leu Trp Val Phe Cys Cys Arg
        35                  40                  45

Met Gln Gln Trp Thr Glu Thr Arg Ile Tyr Met Thr Asn Leu Ala Val
    50                  55                  60

Ala Asp Leu Cys Leu Leu Cys Thr Leu Pro Phe Val Leu His Ser Leu
65                  70                  75                  80

Arg Asp Thr Ser Asp Thr Pro Leu Cys Gln Leu Ser Gln Gly Ile Tyr
                85                  90                  95

Leu Thr Asn Arg Tyr Met Ser Ile Ser Leu Val Thr Ala Ile Ala Val
            100                 105                 110

Asp Arg Tyr Val Ala Val Arg His Pro Leu Arg Ala Arg Gly Leu Arg
        115                 120                 125

Ser Pro Arg Gln Ala Ala Ala Val Cys Ala Val Leu Trp Val Leu Val
    130                 135                 140

Ile Gly Ser Leu Val Ala Arg Trp Leu Leu Gly Ile Gln Glu Gly Gly
145                 150                 155                 160

Phe Cys Phe Arg Ser Thr Arg His Asn Phe Asn Ser Met Arg Phe Pro
                165                 170                 175

Leu Leu Gly Phe Tyr Leu Pro Leu Ala Val Val Val Phe Cys Ser Leu
            180                 185                 190

Lys Val Val Thr Ala Leu Ala Gln Arg Pro Pro Thr Asp Val Gly Gln
        195                 200                 205

Ala Glu Ala Thr Arg Lys Ala Ala Arg Met Val Trp Ala Asn Leu Leu
    210                 215                 220

Val Phe Val Val Cys Phe Leu Pro Leu His Val Gly Leu Thr Val Arg
225                 230                 235                 240

Leu Ala Val Gly Trp Asn Ala Cys Ala Leu Leu Glu Thr Ile Arg Arg
                245                 250                 255

Ala Leu Tyr Ile Thr Ser Lys Leu Ser Asp Ala Asn Cys Cys Leu Asp
            260                 265                 270

Ala Ile Cys Tyr Tyr Tyr Met Ala Lys Glu Phe Gln Glu Ala Ser Ala
        275                 280                 285

Leu Ala Val Ala Pro Arg Ala Lys Ala His Lys Ser Gln Asp Ser Leu
    290                 295                 300
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Cys Val Thr Leu Ala
305

<210> 21
<211> 1875
<212> DNA
<213> Human

<400> 21
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tttgtccggg agcctggtct tcccgtcctt gggctgacag gtgctgctgc ctctgagccc 180
tccctgctaa gagctgtgtg ctgggtaagg ctggtggccc tttgggctcc ctgtccagga 240
tttgtgctct ggagggtagg gcttgctggg ctggggactg gaggggaacg tggagctcct 300
tctgcctcct ttcctgcccc atgacagcag gcagatccca ggagagaaga gctcaggaga 360
tgggaagagg atctgtccag gggttagacc tcaagggtga cttggagttc tttacggcac 420
ccatgctttc tttgaggagt tttgtgtttg tgggtgtggg gtcggggctc acctcctccc 480
acatccctgc ccagaggtgg gcagagtggg ggcagtgcct tgctcccccc gctcgctctc 540
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gctccagcga cctcacctgg cccccagcga tcaagctggg cttctacgcc tacttgggcg 660
tcctgctggt gctaggcctg ctgctcaaca gcctggcgct ctgggtgttc tgctgccgca 720
tgcagcagtg gacggagacc cgcatctaca tgaccaacct ggcggtggcc gacctctgcc 780
tgctgtgcac cttgcccttc gtgctgcact ccctgcgaga cacctcagac acgccgctgt 840
gccagctctc ccagggcatc tacctgacca acaggtacat gagcatcagc ctggtcacgg 900
ccatcgccgt ggaccgctat gtggccgtgc ggcacccgct gcgtgcccgc gggctgcggt 960
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cctaagaggc gtgctgtggg cgctgtgggc caggtctcgg gggctccggg aggtgctgcc 1560
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gagggacagg gacaagggca agaggactga ggccagagca aggccaatgt cagagacccc 1740
cgggatgggg cctcacactt gccacccca gaaccagctc acctggccag agtgggttcc 1800
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tccccaccca gagtc 1875

<210> 22
<211> 714
<212> PRT
<213> Human

<400> 22
Met Ser Glu Glu Ile Ile Thr Pro Val Tyr Cys Thr Gly Val Ser Ala
  1   5   10   15

Gln Val Gln Lys Gln Arg Ala Arg Glu Leu Gly Leu Gly Arg His Glu
             20   25   30

Asn Ala Ile Lys Tyr Leu Gly Gln Asp Tyr Glu Gln Leu Arg Val Arg

```
         35                  40                  45

Cys Leu Gln Ser Gly Thr Leu Phe Arg Asp Glu Ala Phe Pro Pro Val
     50                  55                  60

Pro Gln Ser Leu Gly Tyr Lys Asp Leu Gly Pro Asn Ser Ser Lys Thr
 65                  70                  75                  80

Tyr Gly Ile Lys Trp Lys Arg Pro Thr Glu Leu Leu Ser Asn Pro Gln
                 85                  90                  95

Phe Ile Val Asp Gly Ala Thr Arg Thr Asp Ile Cys Gln Gly Ala Leu
            100                 105                 110

Gly Asp Cys Trp Leu Leu Ala Ala Ile Ala Ser Leu Thr Leu Asn Asp
        115                 120                 125

Thr Leu Leu His Arg Val Val Pro His Gly Gln Ser Phe Gln Asn Gly
    130                 135                 140

Tyr Ala Gly Ile Phe His Phe Gln Leu Trp Gln Phe Gly Glu Trp Val
145                 150                 155                 160

Asp Val Val Val Asp Asp Leu Leu Pro Ile Lys Asp Gly Lys Leu Val
                165                 170                 175

Phe Val His Ser Ala Glu Gly Asn Glu Phe Trp Ser Ala Leu Leu Glu
            180                 185                 190

Lys Ala Tyr Ala Lys Val Asn Gly Ser Tyr Glu Ala Leu Ser Gly Gly
        195                 200                 205

Ser Thr Ser Glu Gly Phe Glu Asp Phe Thr Gly Gly Val Thr Glu Trp
    210                 215                 220

Tyr Glu Leu Arg Lys Ala Pro Ser Asp Leu Tyr Gln Ile Ile Leu Lys
225                 230                 235                 240

Ala Leu Glu Arg Gly Ser Leu Leu Gly Cys Ser Ile Asp Ile Ser Ser
                245                 250                 255

Val Leu Asp Met Glu Ala Ile Thr Phe Lys Lys Leu Val Lys Gly His
            260                 265                 270

Ala Tyr Ser Val Thr Gly Ala Lys Gln Val Asn Tyr Arg Gly Gln Val
        275                 280                 285

Val Ser Leu Ile Arg Met Arg Asn Pro Trp Gly Glu Val Glu Trp Thr
    290                 295                 300

Gly Ala Trp Ser Asp Ser Ser Ser Glu Trp Asn Asn Val Asp Pro Tyr
305                 310                 315                 320

Glu Arg Asp Gln Leu Arg Val Lys Met Glu Asp Gly Glu Phe Trp Met
                325                 330                 335

Ser Phe Arg Asp Phe Met Arg Glu Phe Thr Arg Leu Glu Ile Cys Asn
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            340                 345                 350

Leu Thr Pro Asp Ala Leu Lys Ser Arg Thr Ile Arg Lys Trp Asn Thr
        355                 360                 365

Thr Leu Tyr Glu Gly Thr Trp Arg Arg Gly Ser Thr Ala Gly Gly Cys
    370                 375                 380

Arg Asn Tyr Pro Ala Thr Phe Trp Val Asn Pro Gln Phe Lys Ile Arg
385                 390                 395                 400

Leu Asp Glu Thr Asp Asp Pro Asp Asp Tyr Gly Asp Arg Glu Ser Gly
                405                 410                 415

Cys Ser Phe Val Leu Ala Leu Met Gln Lys His Arg Arg Arg Glu Arg
            420                 425                 430

Arg Phe Gly Arg Asp Met Glu Thr Ile Gly Phe Ala Val Tyr Glu Val
        435                 440                 445

Pro Pro Glu Leu Val Gly Gln Pro Ala Val His Leu Lys Arg Asp Phe
    450                 455                 460

Phe Leu Ala Asn Ala Ser Arg Ala Arg Ser Glu Gln Phe Ile Asn Leu
465                 470                 475                 480

Arg Glu Val Ser Thr Arg Phe Arg Leu Pro Pro Gly Glu Tyr Val Val
                485                 490                 495

Val Pro Ser Thr Phe Glu Pro Asn Lys Glu Gly Asp Phe Val Leu Arg
            500                 505                 510

Phe Phe Ser Glu Lys Ser Ala Gly Thr Val Glu Leu Asp Asp Gln Ile
        515                 520                 525

Gln Ala Asn Leu Pro Asp Glu Gln Val Leu Ser Glu Glu Glu Ile Asp
    530                 535                 540

Glu Asn Phe Lys Ala Leu Phe Arg Gln Leu Ala Gly Glu Asp Met Glu
545                 550                 555                 560

Ile Ser Val Lys Glu Leu Arg Thr Ile Leu Asn Arg Ile Ile Ser Lys
                565                 570                 575

His Lys Asp Leu Arg Thr Lys Gly Phe Ser Leu Glu Ser Cys Arg Ser
            580                 585                 590

Met Val Asn Leu Met Asp Arg Asp Gly Asn Gly Lys Leu Gly Leu Val
        595                 600                 605

Glu Phe Asn Ile Leu Trp Asn Arg Ile Arg Asn Tyr Leu Ser Ile Phe
    610                 615                 620

Arg Lys Phe Asp Leu Asp Lys Ser Gly Ser Met Ser Ala Tyr Glu Met
625                 630                 635                 640

Arg Met Ala Ile Glu Ser Ala Gly Phe Lys Leu Asn Lys Lys Leu Tyr
```

645 650 655

Glu Leu Ile Ile Thr Arg Tyr Ser Glu Pro Asp Leu Ala Val Asp Phe
660 665 670

Asp Asn Phe Val Cys Cys Leu Val Arg Leu Glu Thr Met Phe Arg Phe
675 680 685

Phe Lys Thr Leu Asp Thr Asp Leu Asp Gly Val Val Thr Phe Asp Leu
690 695 700

Phe Lys Trp Leu Gln Leu Thr Met Phe Ala
705 710

<210> 23
<211> 700
<212> PRT
<213> Human

<400> 23
Met Ala Gly Ile Ala Ala Lys Leu Ala Lys Asp Arg Glu Ala Ala Glu
1 5 10 15

Gly Leu Gly Ser His Glu Arg Ala Ile Lys Tyr Leu Asn Gln Asp Tyr
20 25 30

Glu Ala Leu Arg Asn Glu Cys Leu Glu Ala Gly Thr Leu Phe Gln Asp
35 40 45

Pro Ser Phe Pro Ala Ile Pro Ser Ala Leu Gly Phe Lys Glu Leu Gly
50 55 60

Pro Tyr Ser Ser Lys Thr Arg Gly Met Arg Trp Lys Arg Pro Thr Glu
65 70 75 80

Ile Cys Ala Asp Pro Gln Phe Ile Ile Gly Gly Ala Thr Arg Thr Asp
85 90 95

Ile Cys Gln Gly Ala Leu Gly Asp Cys Trp Leu Leu Ala Ala Ile Ala
100 105 110

Ser Leu Thr Leu Asn Glu Glu Ile Leu Ala Arg Val Val Pro Leu Asn
115 120 125

Gln Ser Phe Gln Glu Asn Tyr Ala Gly Ile Phe His Phe Gln Phe Trp
130 135 140

Gln Tyr Gly Glu Trp Val Glu Val Val Val Asp Asp Arg Leu Pro Thr
145 150 155 160

Lys Asp Gly Glu Leu Leu Phe Val His Ser Ala Glu Gly Ser Glu Phe
165 170 175

Trp Ser Ala Leu Leu Glu Lys Ala Tyr Ala Lys Ile Asn Gly Cys Tyr
180 185 190

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Glu Ala Leu Ser Gly Gly Ala Thr Thr Glu Gly Phe Glu Asp Phe Thr
        195                 200                 205

Gly Gly Ile Ala Glu Trp Tyr Glu Leu Lys Lys Pro Pro Pro Asn Leu
    210                 215                 220

Phe Lys Ile Ile Gln Lys Ala Leu Gln Lys Gly Ser Leu Leu Gly Cys
225                 230                 235                 240

Ser Ile Asp Ile Thr Ser Ala Ala Asp Ser Glu Ala Ile Thr Phe Gln
                245                 250                 255

Lys Leu Val Lys Gly His Ala Tyr Ser Val Thr Gly Ala Glu Glu Val
            260                 265                 270

Glu Ser Asn Gly Ser Leu Gln Lys Leu Ile Arg Ile Arg Asn Pro Trp
        275                 280                 285

Gly Glu Val Glu Trp Thr Gly Arg Trp Asn Asp Asn Cys Pro Ser Trp
    290                 295                 300

Asn Thr Ile Asp Pro Glu Glu Arg Glu Arg Leu Thr Arg Arg His Glu
305                 310                 315                 320

Asp Gly Glu Phe Trp Met Ser Phe Ser Asp Phe Leu Arg His Tyr Ser
                325                 330                 335

Arg Leu Glu Ile Cys Asn Leu Thr Pro Asp Thr Leu Thr Ser Asp Thr
            340                 345                 350

Tyr Lys Lys Trp Lys Leu Thr Lys Met Asp Gly Asn Trp Arg Arg Gly
        355                 360                 365

Ser Thr Ala Gly Gly Cys Arg Asn Tyr Pro Asn Thr Phe Trp Met Asn
    370                 375                 380

Pro Gln Tyr Leu Ile Lys Leu Glu Glu Glu Asp Glu Asp Glu Glu Asp
385                 390                 395                 400

Gly Glu Ser Gly Cys Thr Phe Leu Val Gly Leu Ile Gln Lys His Arg
                405                 410                 415

Arg Arg Gln Arg Lys Met Gly Glu Asp Met His Thr Ile Gly Phe Gly
            420                 425                 430

Ile Tyr Glu Val Pro Glu Glu Leu Ser Gly Gln Thr Asn Ile His Leu
        435                 440                 445

Ser Lys Asn Phe Phe Leu Thr Asn Arg Ala Arg Glu Arg Ser Asp Thr
    450                 455                 460

Phe Ile Asn Leu Arg Glu Val Leu Asn Arg Phe Lys Leu Pro Pro Gly
465                 470                 475                 480

Glu Tyr Ile Leu Val Pro Ser Thr Phe Glu Pro Asn Lys Asp Gly Asp
                485                 490                 495
```

```
Phe Cys Ile Arg Val Phe Ser Glu Lys Lys Ala Asp Tyr Gln Ala Val
            500                 505                 510

Asp Asp Glu Ile Glu Ala Asn Leu Glu Glu Phe Asp Ile Ser Glu Asp
        515                 520                 525

Asp Ile Asp Asp Gly Val Arg Arg Leu Phe Ala Gln Leu Ala Gly Glu
    530                 535                 540

Asp Ala Glu Ile Ser Ala Phe Glu Leu Gln Thr Ile Leu Arg Arg Val
545                 550                 555                 560

Leu Ala Lys Arg Gln Asp Ile Lys Ser Asp Gly Phe Ser Ile Glu Thr
                565                 570                 575

Cys Lys Ile Met Val Asp Met Leu Asp Ser Asp Gly Ser Gly Lys Leu
            580                 585                 590

Gly Leu Lys Glu Phe Tyr Ile Leu Trp Thr Lys Ile Gln Lys Tyr Gln
        595                 600                 605

Lys Ile Tyr Arg Glu Ile Asp Val Asp Arg Ser Gly Thr Met Asn Ser
    610                 615                 620

Tyr Glu Met Arg Lys Ala Leu Glu Glu Ala Gly Phe Lys Met Pro Cys
625                 630                 635                 640

Gln Leu His Gln Val Ile Val Ala Arg Phe Ala Asp Asp Gln Leu Ile
                645                 650                 655

Ile Asp Phe Asp Asn Phe Val Arg Cys Leu Val Arg Leu Glu Thr Leu
            660                 665                 670

Phe Lys Ile Phe Lys Gln Leu Asp Pro Glu Asn Thr Gly Thr Ile Glu
        675                 680                 685

Leu Asp Leu Ile Ser Trp Leu Cys Phe Ser Val Leu
    690                 695                 700


<210> 24
<211> 821
<212> PRT
<213> Human

<400> 24
Met Pro Thr Val Ile Ser Ala Ser Val Ala Pro Arg Thr Ala Ala Glu
  1               5                  10                  15

Pro Arg Ser Pro Gly Pro Val Pro His Pro Ala Gln Ser Lys Ala Thr
             20                  25                  30

Glu Ala Gly Gly Gly Asn Pro Ser Gly Ile Tyr Ser Ala Ile Ile Ser
         35                  40                  45

Arg Asn Phe Pro Ile Ile Gly Val Lys Glu Lys Thr Phe Glu Gln Leu
     50                  55                  60
```

```
His Lys Lys Cys Leu Glu Lys Lys Val Leu Tyr Val Asp Pro Glu Phe
 65                  70                  75                  80

Pro Pro Asp Glu Thr Ser Leu Phe Tyr Ser Gln Lys Phe Pro Ile Gln
                 85                  90                  95

Phe Val Trp Lys Arg Pro Pro Glu Ile Cys Glu Asn Pro Arg Phe Ile
            100                 105                 110

Ile Asp Gly Ala Asn Arg Thr Asp Ile Cys Gln Gly Glu Leu Gly Asp
        115                 120                 125

Cys Trp Phe Leu Ala Ala Ile Ala Cys Leu Thr Leu Asn Gln His Leu
    130                 135                 140

Leu Phe Arg Val Ile Pro His Asp Gln Ser Phe Ile Glu Asn Tyr Ala
145                 150                 155                 160

Gly Ile Phe His Phe Gln Phe Trp Arg Tyr Gly Glu Trp Val Asp Val
                165                 170                 175

Val Ile Asp Asp Cys Leu Pro Thr Tyr Asn Asn Gln Leu Val Phe Thr
            180                 185                 190

Lys Ser Asn His Arg Asn Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala
        195                 200                 205

Tyr Ala Lys Leu His Gly Ser Tyr Glu Ala Leu Lys Gly Gly Asn Thr
    210                 215                 220

Thr Glu Ala Met Glu Asp Phe Thr Gly Gly Val Ala Glu Phe Phe Glu
225                 230                 235                 240

Ile Arg Asp Ala Pro Ser Asp Met Tyr Lys Ile Met Lys Lys Ala Ile
                245                 250                 255

Glu Arg Gly Ser Leu Met Gly Cys Ser Ile Asp Asp Gly Thr Asn Met
            260                 265                 270

Thr Tyr Gly Thr Ser Pro Ser Gly Leu Asn Met Gly Glu Leu Ile Ala
        275                 280                 285

Arg Met Val Arg Asn Met Asp Asn Ser Leu Leu Gln Asp Ser Asp Leu
    290                 295                 300

Asp Pro Arg Gly Ser Asp Glu Arg Pro Thr Arg Thr Ile Ile Pro Val
305                 310                 315                 320

Gln Tyr Glu Thr Arg Met Ala Cys Gly Leu Val Arg Gly His Ala Tyr
                325                 330                 335

Ser Val Thr Gly Leu Asp Glu Val Pro Phe Lys Gly Glu Lys Val Lys
            340                 345                 350

Leu Val Arg Leu Arg Asn Pro Trp Gly Gln Val Glu Trp Asn Gly Ser
        355                 360                 365
```

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Trp Ser Asp Arg Trp Lys Asp Trp Ser Phe Val Asp Lys Asp Glu Lys
    370                 375                 380

Ala Arg Leu Gln His Gln Val Thr Glu Asp Gly Glu Phe Trp Met Ser
385                 390                 395                 400

Tyr Glu Asp Phe Ile Tyr His Phe Thr Lys Leu Glu Ile Cys Asn Leu
                405                 410                 415

Thr Ala Asp Ala Leu Gln Ser Asp Lys Leu Gln Thr Trp Thr Val Ser
            420                 425                 430

Val Asn Glu Gly Arg Trp Val Arg Gly Cys Ser Ala Gly Gly Cys Arg
        435                 440                 445

Asn Phe Pro Asp Thr Phe Trp Thr Asn Pro Gln Tyr Arg Leu Lys Leu
    450                 455                 460

Leu Glu Glu Asp Asp Asp Pro Asp Asp Ser Glu Val Ile Cys Ser Phe
465                 470                 475                 480

Leu Val Ala Leu Met Gln Lys Asn Arg Arg Lys Asp Arg Lys Leu Gly
                485                 490                 495

Ala Ser Leu Phe Thr Ile Gly Phe Ala Ile Tyr Glu Val Pro Lys Glu
            500                 505                 510

Met His Gly Asn Lys Gln His Leu Gln Lys Asp Phe Phe Leu Tyr Asn
        515                 520                 525

Ala Ser Lys Ala Arg Ser Lys Thr Tyr Ile Asn Met Arg Glu Val Ser
    530                 535                 540

Gln Arg Phe Arg Leu Pro Pro Ser Glu Tyr Val Ile Val Pro Ser Thr
545                 550                 555                 560

Tyr Glu Pro His Gln Glu Gly Glu Phe Ile Leu Arg Val Phe Ser Glu
                565                 570                 575

Lys Arg Asn Leu Ser Glu Glu Val Glu Asn Thr Ile Ser Val Asp Arg
            580                 585                 590

Pro Val Lys Lys Lys Lys Thr Lys Pro Ile Ile Phe Val Ser Asp Arg
        595                 600                 605

Ala Asn Ser Asn Lys Glu Leu Gly Val Asp Gln Glu Ser Glu Glu Gly
    610                 615                 620

Lys Gly Lys Thr Ser Pro Asp Lys Gln Lys Gln Ser Pro Gln Pro Gln
625                 630                 635                 640

Pro Gly Ser Ser Asp Gln Glu Ser Glu Glu Gln Gln Gln Phe Arg Asn
                645                 650                 655

Ile Phe Lys Gln Ile Ala Gly Asp Asp Met Glu Ile Cys Ala Asp Glu
            660                 665                 670
```

```
Leu Lys Lys Val Leu Asn Thr Val Val Asn Lys His Lys Asp Leu Lys
        675                 680                 685

Thr His Gly Phe Thr Leu Glu Ser Cys Arg Ser Met Ile Ala Leu Met
    690                 695                 700

Asp Thr Asp Gly Ser Gly Lys Leu Asn Leu Gln Glu Phe His His Leu
705                 710                 715                 720

Trp Asn Lys Ile Lys Ala Trp Gln Lys Ile Phe Lys His Tyr Asp Thr
                725                 730                 735

Asp Gln Ser Gly Thr Ile Asn Ser Tyr Glu Met Arg Asn Ala Val Asn
            740                 745                 750

Asp Ala Gly Phe His Leu Asn Asn Gln Leu Tyr Asp Ile Ile Thr Met
        755                 760                 765

Arg Tyr Ala Asp Lys His Met Asn Ile Asp Phe Asp Ser Phe Ile Cys
    770                 775                 780

Cys Phe Val Arg Leu Glu Gly Met Phe Arg Ala Phe His Ala Phe Asp
785                 790                 795                 800

Lys Asp Gly Asp Gly Ile Ile Lys Leu Asn Val Leu Glu Trp Leu Gln
                805                 810                 815

Leu Thr Met Tyr Ala
            820


<210> 25
<211> 639
<212> PRT
<213> Human

<400> 25
Met Phe Ser Cys Val Lys Pro Tyr Glu Asp Gln Asn Tyr Ser Ala Leu
  1               5                  10                  15

Arg Arg Asp Cys Arg Arg Arg Lys Val Leu Phe Glu Asp Pro Leu Phe
             20                  25                  30

Pro Ala Thr Asp Asp Ser Leu Tyr Tyr Lys Gly Thr Pro Gly Pro Ala
         35                  40                  45

Val Arg Arg Lys Arg Pro Lys Gly Ile Cys Glu Asp Pro Arg Leu Phe
     50                  55                  60

Val Asp Gly Ile Ser Ser His Asp Leu His Gln Gly Gln Val Gly Asn
 65                  70                  75                  80

Cys Trp Phe Val Ala Ala Cys Ser Ser Leu Ala Ser Arg Glu Ser Leu
                85                  90                  95

Trp Gln Lys Val Ile Pro Asp Trp Lys Glu Gln Glu Trp Asp Pro Glu
```

```
            100                 105                 110

Lys Pro Asn Ala Tyr Ala Gly Ile Phe His Phe His Phe Trp Arg Phe
        115                 120                 125

Gly Trp Val Asp Val Val Ile Asp Asp Arg Leu Pro Thr Val Asn Asn
    130                 135                 140

Gln Leu Ile Tyr Cys His Ser Asn Ser Arg Asn Glu Phe Trp Cys Ala
145                 150                 155                 160

Leu Val Glu Lys Ala Tyr Ala Lys Leu Ala Gly Cys Tyr Gln Ala Leu
                165                 170                 175

Asp Gly Gly Asn Thr Ala Asp Ala Leu Val Asp Phe Thr Gly Gly Val
            180                 185                 190

Ser Glu Pro Ile Asp Leu Thr Glu Gly Asp Phe Ala Asn Asp Glu Thr
        195                 200                 205

Lys Arg Asn Gln Leu Phe Glu Arg Met Leu Lys Val His Ser Arg Gly
    210                 215                 220

Gly Leu Ile Ser Ala Ser Ile Lys Ala Val Thr Ala Ala Asp Met Glu
225                 230                 235                 240

Ala Arg Leu Ala Cys Gly Leu Val Lys Gly His Ala Tyr Ala Val Thr
                245                 250                 255

Asp Val Arg Lys Val Arg Leu Gly His Gly Leu Leu Ala Phe Phe Lys
            260                 265                 270

Ser Glu Lys Leu Asp Met Ile Arg Leu Arg Asn Pro Trp Gly Glu Arg
        275                 280                 285

Glu Trp Asn Gly Pro Trp Ser Asp Thr Ser Glu Glu Trp Gln Lys Val
    290                 295                 300

Ser Lys Ser Glu Arg Glu Lys Met Gly Val Thr Val Gln Asp Asp Gly
305                 310                 315                 320

Glu Phe Trp Met Thr Phe Glu Asp Val Cys Arg Tyr Phe Thr Asp Ile
                325                 330                 335

Ile Lys Cys Arg Val Ile Asn Thr Ser His Leu Ser Ile His Lys Thr
            340                 345                 350

Trp Glu Glu Ala Arg Leu His Gly Ala Trp Thr Leu His Glu Asp Pro
        355                 360                 365

Arg Gln Asn Arg Gly Gly Gly Cys Ile Asn His Lys Asp Thr Phe Phe
    370                 375                 380

Gln Asn Pro Gln Tyr Ile Phe Glu Val Lys Lys Pro Glu Asp Glu Val
385                 390                 395                 400

Leu Ile Cys Ile Gln Gln Arg Pro Lys Arg Ser Thr Arg Arg Glu Gly
```

405 410 415

Lys Gly Glu Asn Leu Ala Ile Gly Phe Asp Ile Tyr Lys Val Glu Glu
420 425 430

Asn Arg Gln Tyr Arg Met His Ser Leu Gln His Lys Ala Ala Ser Ser
435 440 445

Ile Tyr Ile Asn Ser Arg Ser Val Phe Leu Arg Thr Asp Gln Pro Glu
450 455 460

Gly Arg Tyr Val Ile Ile Pro Thr Thr Phe Glu Pro Gly His Thr Gly
465 470 475 480

Glu Phe Leu Leu Arg Val Phe Thr Asp Val Pro Ser Asn Cys Arg Glu
485 490 495

Leu Arg Leu Asp Glu Pro Pro His Thr Cys Trp Ser Ser Leu Cys Gly
500 505 510

Tyr Pro Gln Leu Val Thr Gln Val His Val Leu Gly Ala Ala Gly Leu
515 520 525

Lys Asp Ser Pro Thr Gly Ala Asn Ser Tyr Val Ile Ile Lys Cys Glu
530 535 540

Gly Asp Lys Val Arg Ser Ala Val Gln Lys Gly Thr Ser Thr Pro Glu
545 550 555 560

Tyr Asn Val Lys Gly Ile Phe Tyr Arg Lys Lys Leu Ser Gln Pro Ile
565 570 575

Thr Val Gln Val Trp Asn His Arg Val Leu Lys Asp Glu Phe Leu Gly
580 585 590

Gln Val His Leu Lys Ala Asp Pro Asp Asn Leu Gln Ala Leu His Thr
595 600 605

Leu His Leu Arg Asp Arg Asn Ser Arg Gln Pro Ser Asn Leu Pro Gly
610 615 620

Thr Val Ala Val His Ile Leu Ser Ser Thr Ser Leu Met Ala Val
625 630 635

<210> 26
<211> 641
<212> PRT
<213> Mus musculus

<400> 26
Met Gly Pro Pro Leu Lys Leu Phe Lys Asn Gln Lys Tyr Gln Glu Leu
1 5 10 15

Lys Gln Glu Cys Met Lys Asp Gly Arg Leu Phe Cys Asp Pro Thr Phe
20 25 30

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Leu Pro Glu Asn Asp Ser Leu Phe Phe Asn Arg Leu Leu Pro Gly Lys
         35                  40                  45

Val Val Trp Lys Arg Pro Gln Asp Ile Ser Asp Asp Pro His Leu Ile
     50                  55                  60

Val Gly Asn Ile Ser Asn His Gln Leu Ile Gln Gly Arg Leu Gly Asn
 65                  70                  75                  80

Lys Ala Met Ile Ser Ala Phe Ser Cys Leu Ala Val Gln Glu Ser His
                 85                  90                  95

Trp Thr Lys Ala Ile Pro Asn His Lys Asp Gln Glu Trp Asp Pro Arg
            100                 105                 110

Lys Pro Glu Lys Tyr Ala Gly Ile Phe His Phe Arg Phe Trp His Phe
        115                 120                 125

Gly Glu Trp Thr Glu Val Val Ile Asp Asp Leu Leu Pro Thr Ile Asn
    130                 135                 140

Gly Asp Leu Val Phe Ser Phe Ser Thr Ser Met Asn Glu Phe Trp Asn
145                 150                 155                 160

Ala Leu Leu Glu Lys Ala Tyr Ala Lys Leu Leu Gly Cys Tyr Glu Ala
                165                 170                 175

Leu Asp Gly Leu Thr Ile Thr Asp Ile Ile Met Asp Phe Thr Gly Thr
            180                 185                 190

Leu Ala Glu Ile Ile Asp Met Gln Lys Gly Arg Tyr Thr Asp Leu Val
        195                 200                 205

Glu Glu Lys Tyr Lys Leu Phe Gly Glu Leu Tyr Lys Thr Phe Thr Lys
    210                 215                 220

Gly Gly Leu Ile Cys Cys Ser Ile Glu Ser Pro Ser Gln Glu Glu Gln
225                 230                 235                 240

Glu Val Glu Thr Asp Trp Gly Leu Leu Lys Gly Tyr Thr Tyr Thr Met
                245                 250                 255

Thr Asp Ile Arg Lys Leu Arg Leu Gly Glu Arg Leu Val Glu Val Phe
            260                 265                 270

Ser Thr Glu Lys Leu Tyr Met Val Arg Leu Arg Asn Pro Leu Gly Arg
        275                 280                 285

Gln Glu Trp Ser Gly Pro Trp Ser Glu Ile Ser Glu Glu Trp Gln Gln
    290                 295                 300

Leu Thr Val Thr Asp Arg Lys Asn Leu Gly Leu Val Met Ser Asp Asp
305                 310                 315                 320

Gly Glu Phe Trp Met Ser Leu Glu Asp Phe Cys His Asn Phe His Lys
                325                 330                 335
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Leu Asn Val Cys Arg Asn Val Asn Asn Pro Val Phe Gly Arg Lys Glu
            340                 345                 350

Leu Glu Ser Val Val Gly Cys Trp Thr Val Asp Asp Asp Pro Leu Met
        355                 360                 365

Asn Arg Ser Gly Gly Cys Tyr Asn Asn Arg Asp Thr Phe Leu Gln Asn
    370                 375                 380

Pro Gln Tyr Ile Phe Thr Val Pro Glu Asp Gly His Lys Val Ile Met
385                 390                 395                 400

Ser Leu Gln Gln Lys Asp Leu Arg Thr Tyr Arg Arg Met Gly Arg Pro
                405                 410                 415

Asp Asn Tyr Ile Ile Gly Phe Glu Leu Phe Lys Val Glu Met Asn Arg
            420                 425                 430

Arg Phe Arg Leu His His Leu Tyr Ile Gln Glu Arg Ala Gly Thr Ser
        435                 440                 445

Thr Tyr Ile Asp Thr Arg Thr Val Phe Leu Ser Lys Tyr Leu Lys Lys
    450                 455                 460

Gly Ser Tyr Val Leu Val Pro Thr Met Phe Gln His Gly Arg Thr Ser
465                 470                 475                 480

Glu Phe Leu Leu Arg Ile Phe Ser Glu Val Pro Val Gln Leu Arg Glu
                485                 490                 495

Leu Thr Leu Asp Met Pro Lys Met Ser Cys Trp Asn Leu Ala Arg Gly
            500                 505                 510

Tyr Pro Lys Val Val Thr Gln Ile Thr Val His Ser Ala Glu Gly Leu
        515                 520                 525

Glu Lys Lys Tyr Ala Asn Glu Thr Val Asn Pro Tyr Leu Ile Ile Lys
    530                 535                 540

Cys Gly Lys Glu Glu Val Arg Ser Pro Val Gln Lys Asn Thr Val His
545                 550                 555                 560

Ala Ile Phe Asp Thr Gln Ala Val Phe Tyr Arg Arg Thr Thr Asp Ile
                565                 570                 575

Pro Ile Ile Ile Gln Val Trp Asn Ser Arg Lys Phe Cys Asp Gln Phe
            580                 585                 590

Leu Gly Gln Val Thr Leu Asp Ala Asp Pro Ser Asp Cys Arg Asp Leu
        595                 600                 605

Lys Ser Leu Tyr Leu Arg Lys Lys Gly Gly Pro Thr Ala Lys Val Lys
    610                 615                 620

Gln Gly His Ile Ser Phe Lys Val Ile Ser Ser Asp Asp Leu Thr Glu
625                 630                 635                 640
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Leu

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<211> 703
<212> PRT
<213> RAT

<400> 27
Met Ala Ala Leu Ala Ala Gly Val Ser Lys Gln Arg Ala Val Ala Glu
1 5 10 15

Gly Leu Gly Ser Asn Gln Asn Ala Val Lys Tyr Leu Gly Gln Asp Phe
20 25 30

Glu Thr Leu Arg Lys Gln Cys Leu Asn Ser Gly Val Leu Phe Lys Asp
35 40 45

Pro Glu Phe Pro Ala Cys Pro Ser Ala Leu Gly Tyr Lys Asp Leu Gly
50 55 60

Pro Gly Ser Pro Asp Thr Gln Gly Ile Val Trp Lys Arg Pro Thr Glu
65 70 75 80

Leu Cys Pro Asn Pro Gln Phe Ile Val Gly Gly Ala Thr Arg Thr Asp
85 90 95

Ile Arg Gln Gly Gly Leu Gly Asp Cys Trp Leu Leu Ala Ala Ile Ala
100 105 110

Ser Leu Thr Leu Asn Glu Lys Leu Leu Tyr Arg Val Leu Pro Arg Asp
115 120 125

Gln Ser Phe Gln Lys Asp Tyr Ala Gly Ile Phe His Phe Gln Phe Trp
130 135 140

Gln Tyr Gly Glu Trp Val Glu Val Val Ile Asp Asp Arg Leu Pro Thr
145 150 155 160

Lys Asn Gly Gln Leu Leu Phe Leu His Ser Glu Glu Gly Asn Glu Phe
165 170 175

Trp Ser Ala Leu Leu Glu Lys Ala Tyr Ala Lys Leu Asn Gly Ser Tyr
180 185 190

Glu Ala Leu Val Gly Gly Ser Thr Ile Glu Gly Phe Glu Asp Phe Thr
195 200 205

Gly Gly Ile Ser Glu Phe Tyr Asp Leu Lys Lys Pro Pro Glu Asn Leu
210 215 220

Tyr Tyr Ile Ile Gln Lys Ala Leu Arg Lys Gly Ser Leu Leu Gly Cys
225 230 235 240

Ser Ile Asp Val Ser Thr Ala Ala Glu Ala Glu Ala Thr Thr Arg Gln
245 250 255

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Lys Leu Val Lys Gly His Ala Tyr Ser Val Thr Gly Val Glu Glu Val
            260                 265                 270

Asn Phe His Gly Arg Pro Glu Lys Leu Ile Arg Leu Arg Asn Pro Trp
        275                 280                 285

Gly Glu Val Glu Trp Ser Gly Ala Trp Ser Asp Asn Ala Pro Glu Trp
    290                 295                 300

Asn Tyr Ile Asp Pro Arg Arg Lys Glu Glu Leu Asp Lys Lys Ala Glu
305                 310                 315                 320

Asp Gly Glu Phe Trp Met Ser Phe Ser Asp Phe Leu Lys Gln Tyr Ser
                325                 330                 335

Arg Leu Glu Ile Cys Asn Leu Ser Pro Asp Ser Leu Ser Ser Glu Glu
            340                 345                 350

Ile His Lys Trp Asn Leu Val Leu Phe Asn Gly Arg Trp Thr Arg Gly
        355                 360                 365

Ser Thr Ala Gly Gly Cys Leu Asn Tyr Pro Gly Thr Tyr Trp Thr Asn
    370                 375                 380

Pro Gln Phe Lys Ile His Leu Asp Glu Val Asp Glu Asp Gln Glu Glu
385                 390                 395                 400

Gly Thr Ser Glu Pro Cys Cys Thr Val Leu Leu Gly Leu Met Gln Lys
                405                 410                 415

Asn Arg Arg Arg Gln Lys Arg Ile Gly Gln Gly Met Leu Ser Ile Gly
            420                 425                 430

Tyr Ala Val Tyr Gln Ile Pro Lys Glu Leu Glu Ser His Thr Asp Ala
        435                 440                 445

His Leu Gly Arg Asp Phe Phe Leu Gly Arg Gln Pro Ser Thr Cys Ser
    450                 455                 460

Ser Thr Tyr Met Asn Leu Arg Glu Val Ser Ser Arg Val Arg Leu Pro
465                 470                 475                 480

Pro Gly Gln Tyr Leu Val Val Pro Ser Thr Phe Glu Pro Phe Lys Asp
                485                 490                 495

Gly Asp Phe Cys Leu Arg Val Phe Ser Glu Lys Lys Ala Lys Ala Leu
            500                 505                 510

Glu Ile Gly Asp Thr Val Ser Gly His Pro His Glu Pro His Pro Arg
        515                 520                 525

Asp Met Asp Glu Glu Asp Glu His Val Arg Ser Leu Phe Glu Glu Phe
    530                 535                 540

Val Gly Lys Asp Ser Glu Ile Ser Ala Asn Gln Leu Lys Arg Val Leu
545                 550                 555                 560
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Asn Glu Val Leu Ser Lys Arg Thr Asp Met Lys Phe Asp Gly Phe Asn
                565                 570                 575

Ile Asn Thr Cys Arg Glu Met Ile Ser Leu Leu Asp Ser Asp Gly Thr
            580                 585                 590

Gly Ser Leu Gly Pro Met Glu Phe Lys Thr Leu Trp Leu Lys Ile Arg
        595                 600                 605

Thr Tyr Leu Glu Ile Phe Gln Glu Met Asp His Asn His Val Gly Thr
    610                 615                 620

Ile Glu Ala His Glu Met Arg Thr Ala Leu Lys Lys Ala Gly Phe Thr
625                 630                 635                 640

Leu Asn Asn Gln Val Gln Gln Thr Ile Ala Met Arg Tyr Ala Cys Ser
                645                 650                 655

Lys Leu Gly Val Asp Phe Asn Gly Phe Val Ala Cys Met Ile Arg Leu
            660                 665                 670

Glu Thr Leu Phe Lys Leu Phe Arg Leu Leu Asp Lys Asp Gln Asn Gly
        675                 680                 685

Ile Val Gln Leu Ser Leu Ala Glu Trp Leu Cys Cys Val Leu Val
    690                 695                 700


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<211> 690
<212> PRT
<213> Human

<400> 28
Met Pro Tyr Leu Tyr Arg Ala Pro Gly Pro Gln Ala His Pro Val Pro
  1               5                  10                  15

Lys Asp Ala Arg Ile Thr His Ser Ser Gly Gln Ser Phe Glu Gln Met
            20                  25                  30

Arg Gln Glu Cys Leu Gln Arg Gly Thr Leu Phe Glu Asp Ala Asp Phe
        35                  40                  45

Pro Ala Ser Asn Ser Ser Leu Phe Tyr Ser Glu Arg Pro Gln Ile Pro
    50                  55                  60

Phe Val Trp Lys Arg Pro Gly Glu Ile Val Lys Asn Pro Glu Phe Ile
65                  70                  75                  80

Leu Gly Gly Ala Thr Arg Thr Asp Ile Cys Gln Gly Glu Leu Gly Asp
                85                  90                  95

Cys Trp Leu Leu Ala Ala Ile Ala Ser Leu Thr Leu Asn Gln Lys Ala
            100                 105                 110

Leu Ala Arg Val Ile Pro Gln Asp Gln Ser Phe Gly Pro Gly Tyr Ala
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        115                 120                 125

Gly Ile Phe His Phe Gln Phe Trp Gln His Ser Glu Trp Leu Asp Val
    130                 135                 140

Val Ile Asp Asp Arg Leu Pro Thr Phe Arg Asp Arg Leu Val Phe Leu
145                 150                 155                 160

His Ser Ala Asp His Asn Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala
                165                 170                 175

Tyr Ala Lys Leu Asn Gly Ser Tyr Glu Ala Leu Lys Gly Gly Ser Ala
            180                 185                 190

Ile Glu Ala Met Glu Asp Phe Thr Gly Gly Val Ala Glu Thr Phe Gln
        195                 200                 205

Thr Lys Glu Ala Pro Glu Asn Phe Tyr Glu Ile Leu Glu Lys Ala Leu
    210                 215                 220

Lys Arg Gly Ser Leu Leu Gly Cys Phe Ile Asp Thr Arg Ser Ala Ala
225                 230                 235                 240

Glu Ser Glu Ala Arg Thr Pro Phe Gly Leu Ile Lys Gly His Ala Tyr
                245                 250                 255

Ser Val Thr Gly Ile Asp Gln Val Ser Phe Arg Gly Gln Arg Ile Glu
            260                 265                 270

Leu Ile Arg Ile Arg Asn Pro Trp Gly Gln Val Glu Trp Asn Gly Ser
        275                 280                 285

Trp Ser Asp Ser Ser Pro Glu Trp Arg Ser Val Gly Pro Ala Glu Gln
    290                 295                 300

Lys Arg Leu Cys His Thr Ala Leu Asp Asp Gly Glu Phe Trp Met Ala
305                 310                 315                 320

Phe Lys Asp Phe Lys Ala His Phe Asp Lys Val Glu Ile Cys Asn Leu
                325                 330                 335

Thr Pro Asp Ala Leu Glu Glu Asp Ala Ile His Lys Trp Glu Val Thr
            340                 345                 350

Val His Gln Gly Ser Trp Val Arg Gly Ser Thr Ala Gly Gly Cys Arg
        355                 360                 365

Asn Phe Leu Asp Thr Phe Trp Thr Asn Pro Gln Ile Lys Leu Ser Leu
    370                 375                 380

Thr Glu Lys Asp Glu Gly Gln Glu Glu Cys Ser Phe Leu Val Ala Leu
385                 390                 395                 400

Met Gln Lys Asp Arg Arg Lys Leu Lys Arg Phe Gly Ala Asn Val Leu
                405                 410                 415

Thr Ile Gly Tyr Ala Ile Tyr Glu Cys Pro Asp Lys Asp Glu His Leu
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420 425 430

Asn Lys Asp Phe Phe Arg Tyr His Ala Ser Arg Ala Arg Ser Lys Thr
435 440 445

Phe Ile Asn Leu Arg Glu Val Ser Asp Arg Phe Lys Leu Pro Pro Gly
450 455 460

Glu Tyr Ile Leu Ile Pro Ser Thr Phe Glu Pro His Gln Glu Ala Asp
465 470 475 480

Phe Cys Leu Arg Ile Phe Ser Glu Lys Lys Ala Ile Thr Arg Asp Met
485 490 495

Asp Gly Asn Val Asp Ile Asp Leu Pro Glu Pro Pro Lys Pro Thr Pro
500 505 510

Pro Asp Gln Glu Thr Glu Glu Glu Gln Arg Phe Arg Ala Leu Phe Glu
515 520 525

Gln Val Ala Gly Glu Asp Met Glu Val Thr Ala Glu Glu Leu Glu Tyr
530 535 540

Val Leu Asn Ala Val Leu Gln Lys Lys Lys Asp Ile Lys Phe Lys Lys
545 550 555 560

Leu Ser Leu Ile Ser Cys Lys Asn Ile Ile Ser Leu Met Asp Thr Ser
565 570 575

Gly Asn Gly Lys Leu Glu Phe Asp Glu Phe Lys Val Phe Trp Asp Lys
580 585 590

Leu Lys Gln Trp Ile Asn Leu Phe Leu Arg Phe Asp Ala Asp Lys Ser
595 600 605

Gly Thr Met Ser Thr Tyr Glu Leu Arg Thr Ala Leu Lys Ala Ala Gly
610 615 620

Phe Gln Leu Ser Ser His Leu Leu Gln Leu Ile Val Leu Arg Tyr Ala
625 630 635 640

Asp Glu Glu Leu Gln Leu Asp Phe Asp Asp Phe Leu Asn Cys Leu Val
645 650 655

Arg Leu Glu Asn Ala Ser Arg Val Phe Gln Ala Leu Ser Thr Lys Asn
660 665 670

Lys Glu Phe Ile His Leu Asn Ile Asn Glu Phe Ile His Leu Thr Met
675 680 685

Asn Ile
690

<210> 29
<211> 29
<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 29
tctcagagtg gggtgaggct gtgatgggg 29

<210> 30
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 30
aataaa 6

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